

AMENDMENTS TO THE DRAWINGS WITHOUT MARKINGS

IN THE DRAWING:

Replacement Sheets for FIGS. 2, 6-9 are submitted herewith. For FIGS. 1, 3-5 the drawings submitted are formal but without any amendments.

REMARKS

The last Office Action of March 15, 2005 has been carefully considered. Reconsideration of the instant application in view of the foregoing amendments and the following remarks is respectfully requested.

Claims 1-35 are pending in the application. Claims 25-35, which have been withdrawn from consideration are hereby cancelled while applicant reserves the right to introduce the same subject matter in a divisional application. Claims 2, 6, 8, 9, 11, 12, 19 and 23 have been amended. Claims 20-22 have been cancelled. No claims have been added. A total of 22 claims are now on file. No claim surcharge is due.

It is noted that the drawings are objected to because clarification by the Examiner was requested with respect to the objections as listed in paragraph 3a-i on page 3 of the Office Action.

It is further noted that the specification was objected to as per paragraph 5a-l in the Office Action.

Claim 11 is objected to based on parenthetical material appearing in the claim.

Furthermore, claims 1-14 are rejected under 35 U.S.C. §112, first paragraph as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Claims 1-19 & 24 are rejected under 35 U.S.C. §112, first paragraph as failing to comply with the enablement requirement containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

Claims 2, 6, 7, 20 & 22-24 are rejected under 35 U.S.C. §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 20-22 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent 4,148,200 (hereinafter: "Schallhorn").

INTERVIEW WITH THE EXAMINER

Record is made of an interview with the Examiner on May 18, 2005. In the interview, the application was extensively discussed. The Examiner is hereby thanked for his assistance in the application and the courtesies extended to counsel at that time. Based on the interview summary by the Examiner, the translation of the movement by the subassembly into a movement of the piston was explained and accepted by the Examiner. In accordance with agreement with the Examiner at the interview, applicant has responded to each of the objections and rejections and submits replacement drawing pages in the manner as requested by the Examiner in paragraph 3a-i of the Office Action.

OBJECTION TO THE DRAWING

Applicant submits herewith amended FIGS. 2, 6-9 labeled "Replacement Sheets" showing the invention. Because FIG. 8 and 9 were duplicative, FIG. 9 was eliminated, so a total of 9 figures remain in the application. The specification has been amended to make it consistent with the amendments to the drawing. No new matter has been added. With respect to FIGS. 2c-2j, the third thrust piston has been drawn in broken lines to indicate its starting position. The drawings of FIGS. 1, 3-5 are submitted as formal but no amendments as per the Examiner's Office action have been made.

With respect to the objection 3b relating to FIG. 3, the Examiner has accepted the view of the progression of the thrust piston as shown in the drawing during the interview. Applicant has amended the specification to provide a description of FIG. 3 as per discussions with the Examiner.

With respect to paragraph 3c, applicant points out that numeral 34 appears in FIG. 3 and refers to the bottom side of the piston.

With respect to paragraph 3d, applicant points out that FIG. 3 does show the guide surface 11 and bottom side 34.

With respect to paragraph 3e, the translation of movement is shown in FIG. 3 and the description of FIG. 3 as submitted as an amendment to the specification. With respect to paragraph 3f, applicant has clarified the "attack angle" by changing the expression to --pitch-- which is a more correct translation of the German term "Einfallswinkel".

With respect to paragraph 3g, applicant submits that the plane of projection has been adequately described as being either above or below the two dimensional plane represented by the page on which the drawing appears.

With respect to paragraph 3h, applicant submits that in paragraph [0058] the "guide surface 32" was amended to "guide surface 44" in correction as per the German text. In that manner it becomes clear that the clearance of the pistons with respect to their impact with the guide surfaces of the subassemblies is balanced by the spring element located between the two pistons.

With respect to paragraph 3i, FIG. 9 has been eliminated as duplicative of FIG. 8. It is believed that by eliminating FIG. 9, the sequence for the two pistons impact has been clarified.

OBJECTIONS TO THE SPECIFICATION

Re: 5a, applicant has amended paragraph [0001] of the specification to indicate that the parent application has been abandoned.

Re: 5b, applicant has amended the section BRIEF DESCRIPTION OF THE DRAWING to more clearly describe the features of FIGS. 2a-j and 6-9.

Re: 5c, the paragraph has been amended to reflect more correctly the translation from German into English of how the subassemblies rotate relative to one another.

Re: 5d, the clarification that the subassemblies are rotating relative to one another eliminated the question in what direction they each move.

Re: 5e and f, the translation of the movement of the subassemblies into a movement of the pistons is dependent upon guidance of the piston between the two subassemblies and whether the piston is moving slower or the same or faster relative to the first subassembly which is the translation ratio of either less than 1, the same as 1 or greater than 1 of the movement of the subassembly into the movement of the piston as FIG. 4 shows in a quantitative manner.

With respect to 5g-i, applicant has amended the specification to express the "attack angle" in German ("Einfallswinkel") as the --pitch-- between the guide surface of, let's say the polygon of the first subassembly, relative to the piston. Also the ratio is expressed as 1 instead of 1:1 thereby following the original German text. It is believed that the amended drawings and the remarks thereto provide the information requested by the Examiner.

With respect to 5j, applicant has amended the specification by changing the English translation for the German "Fortsetzung" into the more correct --projection-- instead of "extension".

With respect to 5k, the phrase the Examiner cites seems to be taken out of context since the sentence goes on. The spring element balances the clearance between the pistons and the various guide surfaces of the two subassemblies.

With respect to 5l, applicant believes that the amendments made to the drawings and the specification clarify the content of paragraph [0059] which sets forth that the recess in the shape of the piston allows for an overlapping between

the pistons thus extending their path between the first and second subassemblies or, conversely, thereby causing greater compression of the spring element.

REJECTION OF CLAIMS 1-24 UNDER 35 U.S.C. §112, FIRST PARAGRAPH

Applicant takes up the rejections by the Examiner in accordance with the numbered paragraphs in the Office Action:

8a. Applicant submits that support of the objected to claim language is found on page 1 paragraph **[0002]** of the specification.

8b-e. Applicant submits that claim 1 as currently drafted is supported by the specification in that in paragraphs **[0041]** et seq. it is set forth how the thrust piston, which is first in a resting position moves from the resting position progressing in movement as the two subassemblies rotate relative to one another a relative angle of rotation. Thus it is inherent in the entire process that the piston goes through phases while being moved along the guidance between the two subassemblies which corresponds to the translation of the movement of the subassembly into the movement of the piston and where at first the ratio of translation is less than 1 and during progressive movement of the piston becomes greater than 1. The movement of the piston along the guidance path includes also a radial tilting of the piston which is clearly shown in FIGS. 6-9.

8f-g. Claim 9 has been amended to more clearly set forth the lateral support surface and the recess of the pistons. Support for the recess is found in paragraph **[0021]** of the specification.

8h-i. Support for the engagement position respectively the receiving position is found in paragraphs [0056] and [0057] in the specification and FIG. 7-9 clearly show these positions. The claim as now drafted sets forth these position with respect to each of the pistons.

8k-m. Claim 20 and 21 have been cancelled thereby obviating the rejections thereof.

In view of the foregoing discussions, the objections and rejections are believed overcome.

Withdrawal of the rejection of the claims 1-24 under 35 U.S.C. §112, first paragraph is thus respectfully requested.

REJECTION OF CLAIMS 1-19 & 24 UNDER 35 U.S.C. §112, FIRST PARAGRAPH

With respect to paragraphs 9a-c, applicant submits during the interview, the translation of the movement of the subassemblies into a movement of the piston was thoroughly discussed and accepted by the Examiner, which is also reflected in the interview summary by the Examiner and of record.

As per discussions had, the ratio of the translation of a movement of the subassemblies into the piston can be less than 1, equal to 1 and greater than 1 depending on the guide path for the piston comprising the guide surfaces of the first and second subassemblies and the surface areas of the piston and their mutual engagement and the frictional forces at work. In accordance with this

mutual engagement, the piston is moving slower than the first subassembly (<1) or it is moved at the same rotational speed (1) as the first subassembly or it moves faster (>1) than the first subassembly.

As the two subassemblies rotate relative to one another at relative angles of rotation, one of the pistons is progressing toward the other idle piston. As the pistons are each configured with a recess in mirror image symmetry, the progressing piston is able to move more closely to the idle piston whereby the two pistons are overlapping with one another or in other words are brought into engagement with each other. This is especially desirable when a heavy damping action is desired. The particular angle the Examiner inquired about relates to that relative angle of rotation of the two subassemblies at which the two pistons are fully engaged as seen in FIG. 9.

In view of the foregoing discussion, the rejections of the claims is believed overcome.

Withdrawal of the rejection of the claims 1-19 and 24 under 35 U.S.C. §112, first paragraph is thus respectfully requested.

REJECTION OF CLAIMS 2, 6, 7, 20 & 22-24 UNDER 35 U.S.C. §112, SECOND PARAGRAPH

With respect to the rejection under paragraph 11d [sic]-g of the Official Action, they are taken up in the same order for response.

The claims as currently presented are fully supported by the specification and the term 'translation' has been clarified and accepted by the Examiner.

Claim 2 was amended to clear up an obvious typographical error.

With respect to claim 6, applicant has amended the claim to change "a restoring force" to --the restoring force--. It is believed that this overcomes the rejection of claim 6.

With respect to claim 7, applicant is at a loss to respond to the rejection since the claim does not contain the phrase "the first position".

With respect to claim 20, this claim is cancelled whereby the rejection is now moot.

With respect to claim 24, the amendment to the claim replaces "displacement phase" with --second phase--.

Withdrawal of the rejection of claims 2, 6, 7, 20 and 22- 24 under 35 U.S.C. §112, second paragraph is thus respectfully requested.

REJECTION OF CLAIMS 20-22 UNDER 35 U.S.C. §102 OVER SCHALLHORN

Since claims 20-22 have been cancelled the rejection thereof has become moot.

CONCLUSION

Applicant believes that when the Examiner reconsiders the claims in the light of the above comments, he will agree that the invention is adequately

disclosed and claimed and in no way properly met or anticipated or even suggested by any references.

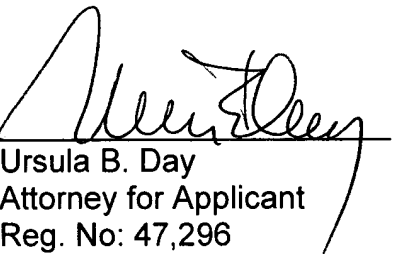
In view of the above presented remarks and amendments, it is respectfully submitted that all claims on file should now be considered patentable over the formal rejections and the prior art and should be allowed.

Reconsideration and allowance of the present application are respectfully requested.

Should the Examiner consider necessary or desirable any formal changes anywhere in the specification, claims and/or drawing, then it is respectfully requested that such changes be made by Examiner's Amendment, if the Examiner feels this would facilitate passage of the case to issuance. If the Examiner feels that it might be helpful in advancing this case by calling the undersigned, applicant would greatly appreciate such a telephone interview.

The Commissioner is hereby authorized to charge fees, which may be required, or credit any overpayment to Deposit Account No. 06-0502.

Respectfully submitted,

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